U.S. Appl. No.: 10/725,284 Attorney Docket No.: 5428D1

(67824.428904)

Response dated January 11, 2007 In response to the Office Action of October 13, 2006

REMARKS

Entry of the foregoing amendments and reconsideration of the application pursuant

to and consistent with 37 CFR 1.112 and in light of the remarks which follow are

respectfully requested. By the present amendments the claims have been amended in order

to expedite prosecution. Particularly, claim 235 no longer recites the use of T1R2

fragments and moreover contains the precise hybridization conditions and finally provides

that the T1R2 receptor polypeptide used in the claimed assays specifically bind to a sweet

ligand. Therefore, the claims only read on operative embodiments, i.e., T1R2 polypeptides

which hind sweet ligands.

Additionally, the objection to claim 235 and to the disclosure is now moot.

Claims 235-271 are rejected under 35 U.S.C. §112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject mater which

applicant regards as the invention. This rejection is respectfully traversed to the extent it

may be applicable to the claims a amended.

The criticism of "putatively" modulates T1R2 taste is urged to be ambiguous. In

response thereto, Applicants submit that it would be clearly understood that the subject

assays screen for compounds that likely modulate taste but that this likelihood should be

confirmed in a taste test. Hence the claims recite "putatively" to take this into account.

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However, if the Examiner prefers this word may be deleted as the subject assays can be

used to identify taste modulators as claimed.

The objection to the hybridization conditions is now moot as the claim has been amended to incorporate the precise stringent hybridization conditions. Withdrawal if this rejection is respectfully requested.

Finally the Office Action indicates that it is unclear what fragments of T1R2 are embraced by the claims. This criticism is also moot as the prior clause in claim 235 allowing for the use of T1R2 fragments in the claimed assays has been deleted in order to expedite prosecution. This subject matter may be pursued again in a continuation application.

Based on the foregoing, the prior 112 second paragraph rejections should be vacated.

Claims 235 and 243-271 were also rejected under 35 USC 112 first paragraph as being broader than the enabling disclosure. This rejection is respectfully traversed however, it is anticipated that it should be moot based on the present amendments.

Particularly, the Office Action indicates that the claims should be restricted to T1R2 sequences that hybridize under specific conditions and which bind a sweet ligand, i.e., sucrose. Also, the Office Action indicates that the specification does not enable assays that use fragments of T1R2 as claimed. In support thereof, the Examiner notes that there is

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inherent unpredictability with respect to modification of proteins and the effect thereof on protein activity, in this instance sweet taste transduction.

It is believed that the Examiner's concerns are now moot. As noted above, the claims no longer recite the use of T1R2 fragments, hence this concern at least is moot. Also, the indication that the specification only enables selection and use of T1R2 sequences that hybridize according to the conditions recited at page 30 is now moot as the claims as amended now recite the specific stringent hybridization condition.

Finally, as noted above the claims now explicitly provide that the T1R2 polypeptides which are used in the subject assays and which are encoded by DNAs that hybridize under said specific stringent hybridization conditions specifically bind a sweet ligand that also specifically binds the unmodified T1R2 polypeptide contained in SEQ ID NO:21. Therefore, a skilled artisan could readily practice the full scope of the claims as it could be determined absent undue experimentation whether a specific T1R2 polypeptide specifically binds a sweet ligand such as sucrose or another natural or synthetic sweet compound.

Accordingly, in view of the foregoing, Applicants respectfully request that the 112 enablement rejection of claims 235 and 243-271 be withdrawn.

Claims 235 and 243-271 also stand rejected under 35 USC 112 first paragraph as not meeting the written description requirement. The bases of the rejection correspond to the concerns raised in the 112 enablement rejection of these same claims.

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amendments and upon consideration of the arguments made in traversal of the 112 enablement rejection of these claims. As noted above, the current claims no longer embrace the use of T1R2 fragments, incorporate the specific hybridization conditions as

It is anticipated that this rejection will be withdrawn based on the present

suggested and moreover require that the T1R2 polypeptides used in the claimed assays

must specifically bind a sweet ligand that specifically binds to the native T1R2 contained

in SEQ ID NO:21.

Based on the foregoing, withdrawal of the 112 first paragraph written description

rejection is respectfully requested.

Finally, claims 235-271 were rejected on double patenting grounds based on claims

235-286 of co-pending US Serial No. 10/725,276. Applicants request that this rejection be

held in abeyance until this application is otherwise in condition for allowance. At that time

a Terminal Disclaimer will be provided if necessary.

This Reply is fully responsive to the non-final Office Action mailed on October 13,

2006.

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It is anticipated that the present amendments and remarks will place the case in condition for allowance. Based on the foregoing, a Notice to that effect is respectfully solicited. Reconsideration and allowance of all claims are respectfully requested. If any issues remain after consideration of this Amendment, Examiner Brannock is respectfully requested to contact the undersigned by telephone (202-419-2018) so that these issues can be resolved by Examiner's Amendment or a Supplemental Response.

Applicants believe that no fee is due with the filing of this Amendment. However, in the event that the calculations of the Office differ, Commissioner is hereby authorized to charge or credit any such variance or credit any overpayment to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

Date: January 11, 2007

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